



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,153	06/19/2003	Guenter Herr	HOE-763	5804
20028	7590	03/24/2005	EXAMINER	
Lipsitz & McAllister, LLC 755 MAIN STREET MONROE, CT 06468				CHOI, WILLIAM C
			ART UNIT	PAPER NUMBER
			2873	

DATE MAILED: 03/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

GM

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/600,153	HERR ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	William C. Choi	2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
 THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 28 February 2005.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,4-6 and 8-23 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) 6,8,11-13 and 17 is/are allowed.  
 6) Claim(s) 1,4,5,9,14-16 and 18-23 is/are rejected.  
 7) Claim(s) 10 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 19 June 2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, 5, 9, 14, 15, 16 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Konno et al (U.S. 5,293,438).

In regard to claim 1, Konno et al discloses an optical projection system comprising: an optical element for shaping radiation fields emitted from a light guide (column 8, lines 27-67, Figure 1a-c) the optical element being formed in a monolithic body having a radiation-field-shaping region (column 8, lines 59-61, Figure 1a, "7, 10") and a connecting region for the light guide having a connecting area for accepting a front face of the light guide (Figure 1a, region between "7" and "8"), said connecting area being adapted approximately to a diameter of the light guide (Figure 1a, region between "7" and "8"), a carrier extending outside said radiation-field-shaping region and adjacent said connecting region (Figure 1a, "10"), said connecting region extending beyond a side of the carrier to form a free standing projection having the connecting area on an end face of said projection (Figure 1a, "7"), said light guide being connected to the optical element solely via the connecting area (column 8, lines 61, Figure 1c).

Regarding claim 4, Konno et al discloses wherein the optical element is a part of the monolithic body extending beyond said element (Figure 1a, "7, 10").

Regarding claim 5, Konno et al discloses wherein the carrier is part of the monolithic body (Figure 1a, "7, 10").

Regarding claim 9, Konno et al discloses wherein the radiation-field-shaping region has an area curved in the manner of a lens for radiation field shaping (Figure 1a, "10").

Regarding claim 14, Konno et al discloses wherein the radiation-field-shaping region has boundary surfaces shaped in such a way that rays reflected on them are substantially not reflected back into the light guide (Figure 1d).

Regarding claim 15, Konno et al discloses wherein the radiation-field-shaping element acts in such a way that it does not collimate exactly (Figure 1d).

Regarding claim 16, Konno et al discloses wherein the light guide is connected to the connecting area of the connecting region such that it is substantially reflection-free (column 8, lines 36-52, Figure 1d).

Regarding claim 18, Konno et al discloses wherein a heatable material is provided by means of which material in a region of the areas of the light guide and the connecting area which are to be connected can be heated up to effect a connection of the light guide and the connecting area (column 5, lines 25-31, re: fusion splicer).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 19-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Konno et al as applied to claim 18 above, and further in view of Conde et al (U.S. 6,453,090 B1).

Regarding claims 19-23, Konno et al discloses as set forth above, but does not specifically disclose wherein a collar of heatable material is heated up by laser radiation passing through the monolithic body. Konno et al does disclose however, wherein the connection is created by means of fusion splicing (column 5, lines 25-31) and within the same field of endeavor, Conde et al teaches wherein it is desirable to fuse optical fibers by means of lasing a collar of heatable material between the fibers for the purpose of avoiding deformations of the fibers (column 8, lines 36-54, Figures 7A-C).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, for a collar of heatable material to be heated up by laser radiation passing through the monolithic body of Konno et al since Konno et al does disclose wherein the connection is created by means of fusion splicing and Conde et al teaches wherein it is desirable to fuse optical fibers by means of lasing a collar of heatable material between the fibers for the purpose of avoiding deformations of the fibers.

***Allowable Subject Matter***

Claims 6, 8, 11-13 and 17 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: The prior art fails to teach a combination of all the claimed features as presented in claims 6 and 8: an optical projection system as claimed, specifically wherein the monolithic body is held by the carrier, which is separate from the monolithic body.

The prior art fails to teach a combination of all the claimed features as presented in claims 11-13 and 17: an optical projection system as claimed, specifically wherein a plurality of individual optical elements is formed in the monolithic body, each optical element having a corresponding radiation-field-shaping region and corresponding connecting area formed on a corresponding connecting region.

Claim 10 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art fails to teach a combination of all the claimed features as presented in claim 10: an optical projection system comprising an optical element as claimed, specifically wherein the radiation-field-shaping region has a refractive index gradient for radiation field shaping.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Edelman (U.S. 4,729,621) is being cited herein to show an optical projection system meeting the limitations of that of the claimed invention. However, additional rejections would have been repetitive.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William C. Choi whose telephone number is (571) 272-2324. The examiner can normally be reached on Monday-Friday from about 9:00 am to 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Y. Epps can be reached on (571) 272-2328. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 2873

*w.c.*  
William Choi  
Patent Examiner  
Art Unit 2873  
March 16, 2005

*Georgia Y. Epps*  
Georgia Epps  
Supervisory Patent Examiner  
Technology Center 2800